Before the

Federal Communications Commission

Washington, D.C. 20554

In the Matter of	)	
	)	
Amendment of Parts 1, 2, 22, 24, 27, 90 of the Commission's Rules to Improve Wireless Coverage Through the Use of Signal Boosters	)	WT Docket No. 10-4
	)	

REPLY COMMENTS OF PUBLIC KNOWLEDGE AND THE NEW AMERICA FOUNDATION

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SUMMARY

Public Knowledge and the New America Foundation ("PK and NAF") commend Wilson Electronics and Verizon Wireless for their cooperative effort to agree on a Joint Proposal for signal booster certification criteria that are both cost-effective and sufficient to avoid harmful interference to carrier networks. If the Commission concurs that the technical specifications set forth in the Wilson/Verizon Joint Proposal are sufficiently rigorous to permit the certification and retail sale of at least low-power, carrier-agnostic devices by a competitive market of third-party providers without the need for consumers to register with, or otherwise seek approval from, individual carriers, it seems likely that the proposed certification requirements strike a practical balance.

However, PK and NAF strongly oppose the Joint Proposal's suggestion that mobile consumer boosters additionally "must be registered with the licensed carriers, either manually or through a Bluetooth connection to the device."[1] Boosters should be generally licensed and available to the public without the need for any carrier coordination, particularly if the coordination would limit the user's ability to amplify signals other than the wireless carriers'. We note that Verizon and Wilson filed separate and conflicting views on the issues of signal booster licensing and carrier-specific registration requirements.[2] Contrary to the Joint Proposal, Wilson's separate filing stated that its "willingness to support the Joint Proposal was premised on the Commission's adoption of the § 307(e) licensing-by-rule scheme proposed in the NPRM." PK and NAF

[1] Verizon Wireless and Wilson Electronics, Inc, Notice of ex parte, In the Matter of Amendment of Parts 1,2,22,24,27,90 and 95 of the Commission's Rules to Improve Wireless Coverage through the Use of Signal Boosters, WT Docket No. 10-4 at 2 (Jul. 25, 2011); see also Notice of Proposed Rulemaking, 26 FCC Rcd 5490 (2011) ("NPRM").

[2] See generally Comments of Verizon Wireless, WT Docket No. 10-4 (Jul. 25, 2011); Comments of Wilson Electronics, Inc., WT Docket No. 10-4 (Jul. 25, 2011).

agree with Wilson's comments that boosters should be generally licensed by rule under § 307(e). Subject to strict device certification rules aimed at avoiding harmful interference, any consumer should be able to purchase and operate a compliant, carrier-agnostic signal booster unfettered by the incumbent licensee, particularly since the carrier's only legitimate interest and right is to operate without undue risk of harmful interference.

PK and NAF have already explained in detail the policy reasons why keeping boosters completely free from carrier control would be the most beneficial option for the public, increasing booster utility and competition among wireless carriers as well as booster manufacturers.[3] PK and NAF will first explain why the Joint Proposal and the Commission's proposed built-in safeguards for the certification of signal boosters are sufficient to address the Commission's concerns regarding harmful interference, and why any additional registration requirements (particularly any carrier-specific registration or approval process) would be unnecessary, burdensome and likely to be ignored by consumers. PK and NAF will then explain why the Commission has ample statutory authority to license wireless boosters by rule under a permissible interpretation of the "citizens band radio service." Lastly, PK and NAF will respond to Verizon's legal arguments why the Commission cannot classify non-interfering boosters under § 307(e) despite the Commission's stated intent to do so.[4]

[3] Comments of Public Knowledge and New America Foundation, WT Docket No. 10-4 (Jul. 25, 2011).

[4] See Amendment of Parts 1, 2, 22, 24, 27, 90 and 95 of the Commission's Rules to Improve Wireless Coverage Through the Use of Signal Boosters, WT Docket 10-4, at ¶ 29 (Apr. 6, 2011) ("NPRM") ("We propose to license the use of signal boosters by rule under Section 307(e) of the Communications Act.").

I. MOBILE CONSUMER BOOSTERS PRESENT A MINIMAL DANGER OF INTERFERENCE, AND THE COMMISSION'S PROPOSED CERTIFICATION SAFEGUARDS ADEQUATELY PROTECT AGAINST THIS RISK WITHOUT THE NEED FOR CARRIER COORDINATION.

PK and NAF agree with commenters (including but not limited to Wilson, T-Mobile, Cellphone-Mate and Wireless Extenders, Inc.) that support the Commission's requirements for boosters to contain built-in technology that automatically prevents the devices from interfering with wireless networks. Most commenters (including wireless carriers) agree that mobile boosters should "have the capability to detect signal feedback or oscillation and deactivate promptly upon such detection," as well as a set maximum power limits.[5] PK and NAF also agree with commenters that argue boosters should automatically reduce their output in the event that the device is approaching a usable cell tower.[6]

The proposed certification standards for boosters are not insignificant; they must be stringently followed in order for safe boosters to reach the public. The booster device's packaging should contain a clear message that the public's license to use the booster technology is on a secondary, non-interfering basis, and that users may not modify the device to operate outside the Commission's requirements.[7] If the proposed technical standards are followed, there is no reason to believe further control over these boosters in the form of registration will be necessary to avoid interference.

[5] Comments of Cellphone-Mate, WT Docket 10-4 at 4 (Jul. 25, 2011); See also *NPRM*, Comments of T-Mobile, WT 10-4 at 10 (Jul. 25, 2011).

[6] See id; see also Comments of Wilson Electronics, Inc. at 3 ("[T]he Joint Proposal is tantamount to a consensus proposal.").

[7] See Notice of Proposed Rulemaking at ¶ 31.

Verizon's assertion that "the only way adequately to protect licensee networks from interference caused by signal boosters today or in the future is to mandate that boosters may only be operated under the control of the CMRS licensee" is without merit.[8] In addition, to the many commenters who explain that the threat of interference caused by consumer-level boosters is minimal, Cellphone-Mate's comments clearly contradict Verizon's claim:

> We have first hand knowledge that properly designed and installed wideband signal boosters are transparent to the wireless network operators and will not cause harmful interference. It is only under extreme and unusual cases that a signal booster might cause harmful interference to wireless services. In all such cases, these problems are typically very easy to solve via our technical support line and require minimal or no support from the cellular carrier.[9]

Furthermore, carriers have talked about all boosters as interference causing devices regardless of their technical specifications. For example, until recently, CTIA claimed that lack of "oscillation safety measures and proper shut down logic" resulted in boosters interfering with wireless networks.[10] However, as booster manufacturers have included such protections in their devices, CTIA has moved the goal post, now asking for

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[8] *See* Comments of Verizon Wireless, WT Docket 10-4 at 18 (July 25, 2011).

[9] Comments of Cellphone-Mate, Inc., WT Docket 10-4 at 5 (Jul. 25, 2011); See also Comments of Wireless Extenders, Inc., WT Docket 10-4 at 4 (Jul. 25, 2011) ("The potential impact of a [consumer] signal booster with a relatively low gain (e.g., below 75dB) are far less significant than that of signal boosters with higher gains (e.g., above 90dB)."), Comments of CellLynx, WT Docket 10-4 at 6 (Jul. 25, 2011) ("If booster manufacturers invoke responsible design practices and conform to existing and proposed FCC regulations, the likelihood of an interference-producing malfunction should be minimal."), Comments of GTECH, WT Docket 10-4 at 4 (Jul. 25, 2011) ("GTECH's wireless networks, including those using signal amplifiers, create no more risk of harmful interference than any other wireless device or cell phone operating on a network.").

[10] Comments of CTIA, *Wireless Telecommunications Bureau Public Notice Regarding The Use of Signal Boosters and Other Signal Amplification Techniques Used with Wireless Services*, 4, WT Docket No. 10-4, (February 5, 2010), *available at* http://files.ctia.org/pdf/filings/100205_-_FILED_Wireless_Booster_Repeater_Comments_with_Attachmt.pdf.)

licensee control of signal boosters in order to prevent interference.[11] It seems like CTIA's objection to signal booster operation free from carrier control is grounded more in its members' desire to maintain control over the booster market than on their need to prevent interference.

If the Commission adopted the stringent technical standards described in the Joint Proposal and by commenters, requiring users to register boosters with a carrier before the device can be activated would amount to overkill.[12] In the unlikely event that a booster does cause interference to a carrier's network, the network will still have the right to enjoin the user from using the offending booster on the grounds that the user has a secondary license and must avoid causing interference on the carrier's primary licensed network.[13] Even without a registration requirement, boosters can be built in such a way that the risk of interference is essentially nonexistent. Therefore, a registration requirement (or worse, a requirement that would allow wireless carriers to shut down users' boosters remotely if they are not approved) only strengthens carriers' control over the booster market.[14]

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[11] Comments of CTIA – The Wireless Association, WT Docket No. 10-4, at 5-8, (July 25, 2011) *available at* http://fjallfoss.fcc.gov/ecfs/document/view?id=7021697119.

[12] See id.

[13] See Notice of Proposed Rulemaking, at ¶ 31 ("any [booster] use would be on a secondary; non-interfering basis, and would have to meet our proposed technical parameters of operation. . . ."); see also AMSC Subsidiary Corp. v. FCC, 216 F.3d 1154, 1158-59 (D.C. Cir. 2000) (holding that conditioning secondary licenses "on a non-interference basis" was an adequate measure for reducing the risk of harmful interference to primary licensees, obviating the need for the primary licensees to receive a license modification hearing).

[14] The risks associated with giving carriers the ability to shut down unapproved boosters are only exacerbated by the fact that carriers under the proposed system would not be held accountable for their actions when shutting down an unapproved booster, and may practically do so even if their motivations for shutting down the booster are anti-competitive. For instance, AT&T has already shown an over-eagerness to declare boosters operated without its explicit authorization as entirely prohibited. The company has contacted retailers, sent Cease and Desist letters and used police escorts in order to threaten booster users in

II. THE COMMISSION HAS BROAD AUTHORITY TO CLASSIFY BOOSTERS AS PART OF THE CITIZEN'S BAND RADIO SERVICE, AND DOING SO REPRESENTS A PERMISSIBLE INTERPRETATION OF THE COMMUNICATIONS ACT.

The term "citizens band radio" is defined under § 307 as having "the meanings given [it] by the Commission by rule."[15] This gives the Commission wide discretion to determine what technologies can be made available under the service. When a term's meaning is not explicitly defined by statute, courts will give great deference to the Commission's interpretation of the term so long as it is "based on a permissible construction of the statute."[16] Not only is the Commission's interpretation permissible, but it also is very much in line with the Congressional mandate that created the citizens band radio service.

CTIA argues that the boosters cannot be classified as a citizens band radio service because "a signal booster radio service is fundamentally different from what Congress envisioned when it granted the Commission the power to authorize the operation of radio stations without individual licenses in the citizens band radio service."[17] The fact that Congress did not envision the particular booster technology at issue is irrelevant; in creating the citizens band radio service, Congress was addressing the general problem of how to efficiently disseminate licenses to the public.

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ways described as "abusive" even while the underlying legality of the boosting devices remains in question. See Letter of Wilson Electronics, Inc., WT Docket No. 10-4, Case Nos. EB-09-DT-0375 and EB-09-MA-0195, 2-4 (Apr. 6, 2010) (describing multiple instances of AT&T threatening booster users for operating without "explicit authorization" from the carrier).

[15] 47 U.S.C. § 307(e)(3) ("For purposes of this subsection, the term 'citizens band radio service' … shall have the meaning[] given [it] by the Commission by rule.").

[16] See Northpoint Tech., Ltd. v. FCC, 414 F.3d 61, 69 (D.C. Cir. 2005) (citing Chevron, U.S.A., Inc. v . NRDC, 467 U.S. 837, 842-43 (1984)).

[17] Comments of CTIA – The Wireless Association, WT Docket No. 10-4 at 9 (Jul. 25, 2011).

A review of the legislative history of § 307(e) shows that when the CB radio was first made available for the public, every owner of a CB radio was required to fill out a postcard license application and mail it back to the Commission. However, this process was cumbersome, needlessly expensive, and few members of the public actually complied with the requirement.[18] In enacting §307(e), Congress also envisioned that it would be problematic if new and useful technologies were operated without *any* license. Unlicensed use of new radio technology could easily lead to chaos and unpredictability, and Congress saw the need to ensure that the Commission could maintain control of the new off-the-shelf technologies while doing so in a practical and cost-effective manner. The statutory compromise was to create the "citizens band radio service" in the Communications Act of 1996, a service that would allow for licensed operation of certain technologies "by rule" without the need for individualized licenses.[19] Included in the creation of the citizens band radio service was broad grant of authority to the Commission in § 307(e)(3) allowing the Commission to define the terms of § 307(e) through rulemaking in order to include future technologies beneficial to the public as it saw fit.[20]

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[18] See H.R. Conf. Rep. No. 97-765, at *18 (1982) ("[S]ection 307 of the communications act would be amended by authorizing the commission to eliminate the individual licensing of citizens band (cb) and radio control services, which would save the commission at least $400,000 annually."); see also Harold Feld, From Third Class Citizen To First Among Equals: Rethinking The Place Of Unlicensed Spectrum In The FCC Hierarchy, 15 CommLaw Conspectus 53, 63-64, available at http://commlaw.cua.edu/res/docs/articles/v15/feld.pdf (citing 47 U.S.C. § 307(e) (2000)) ("Congress sought to relieve the FCC of the expense of processing millions of pro forma licenses to operate CB radios," and therefore created Section 307(e), which allowed the FCC to license radio services "by rule . . . without [the need for] individual licenses.").

[19] See id.; see also 47 U.S.C. § 307(e).

[20] 47 U.S.C. § 307(e)(3) ("For purposes of this subsection, the term 'citizens band radio service' … shall have the meaning[] given [it] by the Commission by rule.").

On its face, § 307(e) of the Communications Act gives the Commission great discretion.[21] CTIA's comments suggesting that the Commission's authority is limited to addressing only technologies like CB radios are therefore without merit. As a matter of statutory construction, "where Congress uses broad language" in a statute granting authority to a regulatory agency to deal with a problem, "evidence of a specific 'catalyz[ing]' force for the enactment 'does not define the outer limits of the statute's coverage.'"[22] The Supreme Court "has consistently instructed that statutes written in broad, sweeping language should be given broad, sweeping application," and this has been consistently followed by other courts.[23] As such, the Commission has the authority to include wireless boosting technology in its definition of the "citizens band radio service" should it find such an action appropriate.

Additionally, CTIA argues that despite the Commission's extremely broad authority,

> [I]f Congress intended citizens band radio service to simply mean 'any spectrum designated by the Commission for *unlicensed* operator use,' Congress would not have needed to explicitly authorize the Commission to waive the individual licensing requirements for other radio services, as it did in Section 307. (emphasis added)[24]

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[21] See id.; see also Harold Feld, From Third Class Citizen To First Among Equals, 15 CommLaw Conspectus at 63-64.

[22] New York v. FERC, 122 S. Ct. 1012, 1025 (2002).

[23] Consumer Electronics Ass'n v. F.C.C., 347 F.3d 291, 298 (D.C. Cir. 2003) (citing New York v. FERC, 122 S. Ct. at 1025) (holding that the Commission has the authority to take "any action necessary" to ensure that television sets can adequately receive all over-the-air broadcast signals, and that challenges to the Commission's authority are "meritless" when Congress has issued "sweeping language" to deal with a problem); see also PGA Tour, Inc. v. Martin, 532 U.S. 661, 689, (2001) ("[T]he fact that a statute can be applied in situations not expressly anticipated by Congress does not demonstrate ambiguity. It demonstrates breadth." (internal quotation marks omitted)).

[24] Comments of CTIA at 10-11.

CTIA has either misunderstood the stated terms of the citizens band radio service or deliberately misinterpreted it. The citizens band radio service is not shorthand for "unlicensed" access by consumers to spectrum. To the contrary, § 307(e) and the citizens band radio service provides an alternative legal authority under which the Commission *grants licenses*, subject to the same limitations and restrictions that all other secondary licensees have (including, in this case, a protection for *boosters* against interference from tertiary licenses and unlicensed users). The fact that the licenses are not individualized on postcards does not mean that they do not exist at all.

Finally, the other radio services mentioned in § 307 – maritime, aviation, and radio control services – are completely independent to the citizens band, subject to their own unique restrictions. Aside from not being licensed for the general public to use, these radio services are affected by very specific legal principles and were added to § 307(e) by Congress, and should not therefore be assumed to fall under the definition of the citizens band radio service.

PK and NAF's previous comments (as well as the Commission's own Notice of Proposed Rulemaking) demonstrate that licensing well-designed, non-interfering wireless boosters by rule is in the public interest, convenience and necessity.[25] Well-built consumer boosters are helpful and convenient devices for the general public. Therefore, the Commission has ample authority to make the devices available to everyone without the need for carrier involvement.

[25] Notice of Proposed Rulemaking, WT Docket 10-4, at ¶ 29 (Apr. 5, 2011) ("Our proposed regulatory framework would facilitate operation of signal boosters to enhance wireless coverage and access to broadband services, while minimizing administrative costs and burdens on the public, Commission licensees, and agency staff, thus serving the public interest, convenience and necessity."); see also Comments of Public Knowledge and the New America Foundation at 1-3.

III. VERIZON'S ARGUMENTS THAT THE COMMISSION CANNOT LEGALLY GRANT GENERAL LICENSES TO CONSUMERS ARE WITHOUT MERIT.

Verizon's arguments suggest that even if boosters can be engineered in a way to eliminate the threat of harmful interference, the Commission is somehow still prohibited from granting new licenses on the same spectrum to third parties.[26] The other wireless carriers such as T-Mobile also echo Verizon's sentiment, yet PK and NAF's comments will focus in particular on Verizon's claims.[27] Verizon's legal claims are meritless, and have been consistently discarded as such by the Commission in both case law and the Commission's administrative decisions. The Commission should likewise dismiss these arguments in this proceeding.

Most of Verizon's arguments rely upon an assumption that it possesses a right to be the "exclusive" user of its licensed spectrum.[28] However, this is a right that does not exist. As the following sections will demonstrate, so long as the Commission prevents an existing licensee from experiencing harmful interference, the Commission may grant general public licenses freely; no right to "exclusive" use is included in a CMRS spectrum license. A license to use the public's spectrum is by statutory mandate temporary and limited to purposes defined under a public interest standard. Any residual non-interfering capacity on a particular band of frequencies has always been subject to licensing for secondary uses and/or for unlicensed use. Furthermore, contrary to Verizon's assertions, authorizing the public to use wireless boosters does not amount to a

[26] See Comments of Verizon Wireless at 18.

[27] See Comments of T-Mobile at 4-5.

[28] See Comments of Verizon at 18-19 ("investments have been made in reliance of the *exclusivity* of the license. . . .")(emphasis added).

breach of an implied covenant of good faith, nor does it constitute a regulatory taking. Lastly, assuming *arguendo* that Verizon *does* have property rights on its licensed spectrum that it claims, its arguments are still spurious, as the general use of non-interfering consumer boosters impairs a carrier's rights in no appreciable way.

A. Wireless Carriers Do Not Have A Right To Be The Exclusive Users Of Spectrum Licensed To Them; Rather, A Spectrum License Only Grants Licensees Protection Against Harmful Interference.

The Commission has ample authority to grant licenses to third parties on the same spectrum so long as they do not present harmful interference. However, Verizon argues that a carrier's license is "exclusive," and therefore the spectrum licensed to it cannot be shared with third parties, even with FCC permission.[29] Verizon has mistakenly interpreted the Communications Act to mean that no other licensees may ever utilize the carrier's licensed spectrum, even with FCC authorization and on a secondary, non-interfering basis. This right of "exclusivity" on a given spectrum band, at least as far as Verizon defines it, in fact does not exist. Furthermore, Verizon has raised this argument previously[30] and over a decade of case law and decisions have refuted this argument. These decisions explain that if there is any "exclusivity" that can be said to exist in a carrier's license, this exclusivity refers to a promise made from the Commission to carriers *solely* to protect them from harmful interference.[31] To assert otherwise is contrary to law as well as the Commission's own orders.[32]

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[29] See id.

[30] See Comments of Verizon Wireless, *Establishment of an Interference Temperature Metric to Quantify and Manage Interference and to Expand Available Unlicensed Operation in Certain Fixed, Mobile and Satellite Frequency Bands,* 1, ET Docket No. 03-237, (April 5, 2004), *available at* http://fjallfoss.fcc.gov/ecfs/document/view?id=6516086642

[31] See e.g., 47 U.S.C. §303 ("[R]egulations not inconsistent with law as it may deem necessary to prevent interference between stations" are the only listed protections a licensee is given with regards to other

Nowhere in the Communications Act does there exist a right of licensees to prevent the Commission from granting additional licenses on the licensed spectrum for the general public.[33] Nor can this so-called "exclusivity right" be inferred beyond the explicit terms of Verizon's license. As explained in § 301: no license "shall be construed to create any right, beyond the terms, conditions, and periods of the license."[34]

A license from the Commission does not grant to carriers any independent right to exclude other licensees if they are not causing interference to the licensee's network. Nor does the Commission's license allow Verizon to control every aspect of a subscribers' use of the carrier's licensed spectrum.[35] Rather, the license solely entitles Verizon to operate its network free from harmful signal interference, which as noted above, properly certified and maintained boosters will not cause.

If the Commission should determine, on a cost-benefit basis, that some form of consumer device registration is needed to prevent or to mitigate harmful interference, then the Commission itself should maintain or authorize a single, streamlined

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licensees); AT&T Wireless Services, Inc. v. F.C.C., 270 F.3d 959, 964 (D.C. Cir. 2001) ("Absent harmful interference, AirCell's new system does not trammel upon petitioners' rights as licensees."); In Re Revision of Comm'n's Rules Regarding Ultra-Wideband Transmission Sys., 18 F.C.C.R. 3857, 3923 n. 188 (2003) (citing AT&T, 270 F.3d at 964) (holding that any alleged "exclusivity" claimed by licensees "does not preclude the Commission from approving new services that do not otherwise affect operationally the wireless carriers' operations"); AMSC Subsidiary Corp. v. F.C.C., 216 F.3d 1154, 1158-59 (D.C. Cir. 2000) (holding that an incumbent spectrum license is not modified by the licensing of third parties on the licensed spectrum if the third-parties' licenses "are expressly conditioned upon their operating 'on a non-interference basis'").

[32] See id.

[33] See generally 47 U.S.C. §§ 301-10. C.f. 47 U.S.C.A. § 309(h) ("The station license shall not vest in the licensee any right to operate the station.").

[34] 47 U.S.C. § 301.

[35] Verizon argues that "investments have been made in reliance of the exclusivity of the license, and the ability to operate free from interference from other users of the same frequency bands." Comments of Verizon at 18-19. As the precedent listed above shows, Verizon's error in this quote is using the word "and": a more accurate way to phrase this phrase would be as follows: "the exclusivity of the license, *which can be defined as* the ability to operate free from interference from other users on the same frequency bands."

clearinghouse for device registrations that operate independently of any booster device manufacturer, commercial wireless carrier, or their respective trade associations.

B. When Carriers Such As Verizon Receive Their Initial Spectrum Licenses, They Waive Their Right To Object To The Commission's Subsequent Regulations On The Grounds Of Their Prior Use.

It does not matter that Verizon and other carriers invested money "in reliance" on their belief that they would not have to share their spectrum with non-interfering boosters used by the general public.[36] When they receive their initial spectrum licenses, carriers waive their right to object to the Commission's new regulatory frameworks on the grounds of an assertion that they had previously been the only licensee on that spectrum band. As §304 states:

> No station license shall be granted by the Commission until the applicant therefor shall have waived any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise.[37]

Verizon may not object to a valid regulation proposed by the Commission solely on the basis that Verizon had grown accustomed to using the spectrum as the "sole" licensee.[38] As mentioned above, the belief that an FCC license grants the licensee the right to control (and monetize) every aspect of spectrum use on its band is inaccurate.

C. The Commission's Classification Of Wireless Boosters Under § 307(e) Does Not Violate An Implied Covenant Of Good Faith, Because The Covenant Applies To Contracts, Not Licenses, And Because Licensing Boosters Via A Regulation Is In The Public Interest And Does Not Specifically Target Wireless Carriers.

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[36] See Comments of Verizon at 17-18 (". . . *investments have been made in reliance* of the exclusivity of the license . . . .") (emphasis added).

[37] 47 U.S.C. § 304.

[38] See id.; see also See DIRECTV, Inc. v. F.C.C., 110 F.3d 816, 826 (D.C. Cir. 1997) (citing Bell Atlantic Telephone Cos. v. FCC, 79 F.3d 1195, 1207 (D.C.Cir.1996))("A change in policy is not arbitrary or capricious merely because it alters the current state of affairs.")

Verizon also argues that the Commission cannot license boosters under § 307(e) because "an implied covenant of good faith and fair dealing places limits on the government's ability to change the terms of an agreement through subsequent legislation to the detriment of the private party."[39] At first blush, Verizon's argument here seems to imply that the Commission may impose no rule to the detriment of incumbent wireless carriers, lest they break an implied covenant of good faith within the Commission's grant. Such an assertion would be absurd, and would unreasonably limit the Commission's authority to create new regulations for the public good.

None of the cases cited by Verizon in its comments make any mention of spectrum licensing.[40] Rather, the cases that make reference to the implied covenant are all mentioned in the context of actual contractual agreements or leases between private parties and the government. The implied covenant of good faith and fair dealing is a term taken from contract law;[41] however, a "license is not a contract between the government and the licensee, and it creates no vested rights."[42]

This is not to say that the Commission may arbitrarily enact regulations that blatantly contradict their purpose as a regulatory agency or exist purely to prevent spectrum holders from enjoying use of the spectrum licensed to them.[43] However, the

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[39] Comments of Verizon at 19.
[40] Comments of Verizon at 19-20 (citing United States v. Winstar, 518 U.S. 839 (1996); Centex Corp. v. United States, 395 F.3d1283 (Fed. Cir. 2005); Mobil Oil Exploration and Producing Southeast, Inc. v. United States, 530 U.S. 604 (2000); Franconia Assocs. v. United States, 61 Fed. Cl. 718 (2004)).
[41] Centex Corp. v. United States, 395 F.3d 1283, 1304 (Fed. Cir. 2005)("The covenant of good faith and fair dealing is an implied duty that *each party to a contract* owes to its contracting partner.")(emphasis added).
[42] Blum v. Ford, 107 S.W.2d 340, 344 (1937); see also Celtronix Telemetry, Inc. v. F.C.C., 272 F.3d 585, 590 (D.C. Cir. 2001) (citing "a long tradition of Commission authority to change rules governing already-issued licenses," and dismissing plaintiff's reliance on United States v. Winstar Corp., 518 U.S. 839 (1996)).
[43] See DIRECTV, Inc. v. F.C.C., 110 F.3d at 826 (citing Bell Atlantic Telephone Cos. v. FCC, 79 F.3d 1195, 1207 (D.C.Cir.1996))("A rule that upsets expectations . . . may be sustained 'if it is reasonable,' i.e.,

Commission's motivations behind disseminating wireless boosters to the public are reasonable. Spectrum is only licensed to private parties in the first instance "if public convenience, interest, or necessity will be served thereby."[44] Signal boosters are a technology designed to benefit the general public and make more effective use of radio. By making them generally accessible, the Commission's actions are in line with its general goals as a regulatory agency operating for the benefit of the public, and not a violation of its duties to operate in good faith.

Furthermore, granting to the public a general license to use signal boosters does not single out any particular spectrum holder for unfair treatment, and therefore cannot be seen as a violation of its regulatory duties.[45] Under the Commission's proposed framework, wireless boosters licensed under §307(e) would be available for anyone to use on any network so long as the devices did not cause interference. Therefore, claiming as Verizon does that the Commission's actions are "targeted at particular licensees" is inaccurate; the Commission's rulemaking is no more targeted at Verizon than it is at every member of the public with the potential to become a spectrum licensee.

D. The Commission's Regulations Do Not Constitute A Taking Because Wireless Carriers Do Not Hold A Recognizable Property Interest In Their Licensed Spectrum.

The Commission's decision to license wireless boosters through § 307(e) cannot amount to a taking because the carriers do not own the licensed spectrum. Carriers have repeatedly presented the takings argument in the context of spectrum licenses, although it

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if it is not 'arbitrary' or 'capricious.' A change in policy is not arbitrary or capricious merely because it alters the current state of affairs.")

[44] § 307(a); see also § 303(g) ("[T]he Commission . . . as public convenience, interest, or necessity requires, shall . . . generally encourage the larger and more effective use of radio in the public interest.")

[45] See Comm. for Effective Cellular Rules v. F.C.C., 53 F.3d 1309, 1319 (D.C. Cir. 1995) (holding that the Commission did not single out incumbent licensees or directly modify their licenses because the Commission "did not choose among contenders for a particular license in this rulemaking, but rather revised the technical specifications for *all* cellular licenses.") (emphasis added).

is well settled in case law that spectrum licensees do not grant a property right in licensed spectrum.[46] In addition, § 301 and the cases that interpret it make it clear that a license is not a recognizable piece of property to be owned: "It is the purpose of this Act, among other things . . . to provide for the use of such channels, *but not the ownership thereof,* by persons for limited periods of time, under licenses granted by Federal authority."[47] Nor could Verizon claim that they have received ownership rights through competitive bidding. As stated in § 309(j)(6): "Nothing in . . . the use of competitive bidding, shall...limit or otherwise affect the requirements of . . . section 301. . . ."[48]

Lastly, assuming *arguendo* that there were some recognizable property right that classifying boosters under § 307(e) would infringe upon, licensing the public to use non-interfering boosters on the same spectrum bands would not amount to a regulatory taking because the regulation would not entail nearly any "diminution in value to the parcel as a whole" (the "whole" in this case referring to the carrier network's total value or use thereof).[49] Authorizing boosters for general use on a wireless network does not make the use of wireless networks (or by extension, the underlying spectrum license) worthless by any stretch. In fact, as the next section illustrates, the general licensing of boosters to the public actually *increases* the usefulness of a wireless network. At this point, and particularly in light of the carrier's § 304 waiver of the right to object to the

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[46] See 47 U.S.C. § 301; see also In re NextWave Pers. Communications, Inc., 200 F.3d 43, 51 (2d Cir. 1999) ("A license does not convey a property right; it merely permits the licensee to use the portion of the spectrum covered by the license in accordance with its terms."); FCC v. Sanders Bros. Radio Station, 309 U.S. 470, 475, 60 S.Ct. 693, 84 L.Ed. 869 (1940) ("[N]o person is to have anything in the nature of a property right as a result of the granting of a license.").

[47] 47 U.S.C. § 301 (emphasis added).

[48] 47 U.S.C. § 309(j)(6).

[49] See *Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393, 413 (1922) ("Government could hardly go on if to some extent values incident to property could not be diminished without paying for every such change in the general law.").

Commission's regulations on the grounds of prior use, the takings argument in the context of spectrum licenses should be dismissed as frivolous.

E. Permitting The Use Of Non-Interfering Wireless Boosters On A Carrier's Licensed Network In No Way Impairs The Carrier's Legitimate Rights.

While Verizon has brought up quasi-property and takings arguments in the context of spectrum licenses before (and with little success), its insistence on bringing up these arguments in order to prevent the general licensing of wireless boosters, a technology that actually *improves their wireless infrastructure*, is particularly unwarranted. Verizon claims that allowing the general public to use boosters on its spectrum somehow "devalue[s] the licensee's beneficial use and enjoyment of the authorized spectrum," or "impairs" its rights as a licensee.[50] This assertion forms the backbone of many of its legal arguments articulated above.

To which PK and NAF ask: how exactly are Verizon's rights injured by the licensing of non-interfering boosters for the public to use on its network? Boosters are only designed to amplify existing signals; they *enhance* the services provided by the carrier on the band, not diminish them. Booster usage significantly improves the quality of wireless service for users, and would increase Verizon's potential network coverage area.[51] As a matter of common sense, *what possible interest* is Verizon trying to protect by preventing the public from freely using non-interfering boosters that improve Verizon's network coverage? Assuming that boosters will be engineered in a way that does not cause significant interference, Verizon's claim of its rights being "impaired" by

[50] Comments of Verizon at 20.

[51] See *Notice of Proposed Rulemaking* at ¶ 11.

the public freely using boosters to amplify signals on its network is absurd. That is, unless Verizon is trying to force consumers to use only carrier-approved boosters on its network in order to extract monopoly rents.

It should also be noted again that Verizon does not merely claim that licensing non-interfering boosters for the general public - even *for the purpose of amplifying Verizon signals* - is damaging to their interests; according to its argument, the impairment Verizon will face is *so severe* that the Commission's adoption of such a licensing arrangement would amount to a breach of an implied covenant of good faith.[52] With respect to Verizon, this argument is overblown to the point of being ridiculous. The general authorization of consumer boosters is an unexpected *windfall* for Verizon - the company should be grateful that it does not as of yet have to pay the Commission for the right to shift the costs of network buildout to its booster-buying customers.[53]

CONCLUSION

For the reasons explained above, the Commission should adopt its initial plan proposed in its *Notice of Proposed Rulemaking* and classify boosters under the § 307(e) citizens band radio service. The Commission should consider whether the technical specifications proposed in the Verizon and Wilson Electronics Joint Proposal strikes the appropriate balance between ensuring that certified boosters will automatically avoid interference with carrier networks and ensuring that the devices remain feasible and affordable for consumer purchase from competing third-party manufacturers and

[52] See Comments of Verizon at 19.

[53] C.f. 47 U.S.C.A. § 309(j)(3)(C) (stating a goal of competitive bidding is the "avoidance of unjust enrichment").

retailers. However, the Commission should under no circumstances require low-power boosters purchased for ordinary home or mobile use to require carrier-specific registration or coordination with existing carriers. If the Commission should determine, on a cost-benefit bases, that some form of consumer device registration is needed to prevent or to mitigate harmful interference, then the Commission itself should maintain or authorize a single, streamlined clearinghouse for device registrations that operate independently of any booster device manufacturer, commercial wireless carrier, or their respective trade associations.

Respectfully submitted,

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